

SWB
C1
cont

- a metal surface having a zinc-containing coating;

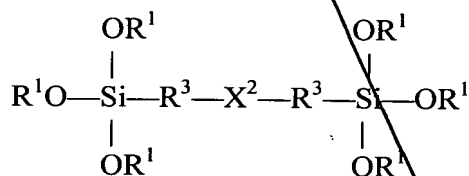
- zinc; and

- zinc alloy;

and

B2
cont

(b) applying a silane solution to said metal surface, said silane solution having at least one vinyl silane and at least one bis-silyl aminosilane, wherein said at least one vinyl silane and said at least one bis-silyl aminosilane have been at least partially hydrolyzed, and wherein the bis-silyl aminosilane comprises:



wherein:

-each R^1 is individually chosen from the group consisting of: hydrogen and $\text{C}_1\text{-C}_{24}$ alkyl;

- each R^3 is individually chosen from the group consisting of: substituted aliphatic groups, unsubstituted aliphatic groups, substituted aromatic groups, and unsubstituted aromatic groups; and

- X^2 is either:



-wherein each R^4 is hydrogen; and

- R^5 is chosen from the groups consisting of: substituted and unsubstituted aliphatic groups, and substituted and unsubstituted aromatic groups.

SUB
C3

-- 9. (Amended) The method of claim 1, wherein each R¹ is individually chosen from the group consisting of: hydrogen, ethyl, methyl, propyl, iso-propyl, butyl, iso-butyl, sec-butyl and ter-butyl.--

B3

Sub D1
cont.

-- 10. (Amended) The method of claim 1, wherein R³ is individually chosen from the group consisting of: C₁ - C₁₀ alkylene, C₁ - C₁₀ alkenylene, arylene, and alkylarylene.--

-- 12. (Amended) The method of claim 1, wherein R⁵ is chosen from the group consisting of: C₁-C₁₀ alkylene, C₁-C₁₀ alkenylene, arylene, and alkylarylene.--

B4
Sub D1
cont.

-- 13. (Amended) The method of claim 1, wherein said bis-silyl aminosilane is chosen from the group consisting of: *bis*-(trimethoxysilylpropyl)amine, *bis*-(triethoxysilylpropyl)amine, and *bis*-(trimethoxysilylpropyl)ethylene diamine.--